IN THE CLAIMS:

1. (Currently Amended) ~~Structure of an~~ An angular pneumatic gripper, comprising:[[,]]

a body including a first element and a second element, said first element being symmetrical and identical to said second element, said first element and said second element being positioned such that said first element is disposed opposite said second element, said first element and said second element defining a cylindrical cavity within said body;

an angular pneumatic piston for reciprocating ~~moving alternatively~~ in a said cylindrical cavity of ~~chamber or sleeve in~~ said body[[,]];

a drive element;

two [[grips]] gripper elements for gripping and releasing an item, said gripper elements being supported and guided in [[the]] said body, said gripper elements being coupled to [[the]] said piston ~~through a~~ via said drive, ~~and two jaws fixed to the grips to block and release the item to be handled, and where the grips can move~~ said gripper elements being movable at angles in opposite directions between an open and closed position ~~by means of~~ via said drive element and ~~in response to~~ via movement ~~the alternating movements of the~~ said piston, ~~characterized by the fact that said body is made up of two symmetric and identical elements or shells realised and finished individually by forming and then associated and fixed face to face to form together the housing chamber of said piston and the~~ said first element and said second element defining a means for receiving and guiding ~~to receive and guide~~ said drive element ~~in a transverse manner and said grips to turn~~,

said first element and said second element ~~elements or shells~~ being formed via ~~made using~~ die-casting, sintering or forging processes, ~~using compatible materials for these forming techniques~~ each element of said body having a support base, an intermediate section element, two shoulder elements and a top crosspiece, each shoulder element being connected to said top crosspiece and said intermediate section element, said intermediate section of each element centrally forming said cylindrical cavity, said cylindrical cavity having an open end and a closed end, said open end of said cylindrical cavity of said first element being opposite said open end of said cylindrical cavity of said second element, said first element and said second element having a top wall, two housing elements and a sliding surface, said top wall, said two housing elements and said sliding surface defining a chamber having a first opening on one side and a second opening on another side, one housing element being opposite another housing element, said first opening of said first element being opposite said first opening of said second element, said sliding surface being positioned parallel above said cylindrical cavity and having a half-slot located at a side of said first opening, said intermediate section defining holes for receiving fasteners, said holes being adjacent said cylindrical cavity and extending parallel to said cylindrical cavity, said first element being fixed to said second element such that said chamber of said first element and said chamber of said second element form a drive receiving chamber and said cylindrical cavity of said first element and said cylindrical cavity of said second element form a piston receiving chamber and said half-slot of said first element and said half-slot of said second element form a full slot, said drive element engaging said sliding surface of said first element

and said second element, said drive element being connected to said piston via a through pin, said through pin extending through said full slot, one gripper element extending through said second opening of said first element, another gripper element extending through said second opening of said second element, whereby a portion of each gripper element is located within said drive receiving chamber.

2. (Canceled)

3. (Currently Amended) ~~Structure of an~~ An angular pneumatic chuck according to claim 1, further comprising:

a first geared wheel;

a second geared wheel;

a support element defining a receiving hole, wherein each gripper element has a lower cylindrical section, said lower cylindrical section defining ~~crossed by~~ a polygonal hole, said lower cylindrical section being [[and]] coupled to said first geared wheel and said second geared wheel ~~two geared wheels~~, said first geared wheel being located on one side of said lower cylindrical section and said second geared wheel being located on another side of said lower cylindrical section ~~one per side~~, each geared wheel [[one]] having~~, on one side,~~ a polygonal hub on one side, said polygonal hole receiving said polygonal hub ~~to house and fit into the transverse polygonal hole of the grip and, from the opposite side~~, each geared wheel having a cylindrical hub on another side, said receiving hole of said support hole receiving

said cylindrical hub ~~to house and turn in a corresponding housing shaped in a support element~~, [[the]] said first geared wheel and said second geared wheel ~~geared wheels~~ being attached to ~~their respective grip by~~ one of said gripper elements via a bolt ~~passing~~ extending through the hubs of the geared wheels, said bolt [[and]] forming an axis of [[the]] rotation axis of the gripper element, said support element supporting ~~and said support being equipped to support the~~ collateral gear wheels of the two ~~grips of the~~ gripper elements.

4. (Currently Amended) ~~Structure of an~~ An angular pneumatic gripper according to claim 3, wherein [[the]] said drive element has a pair of indexing racks, each indexing rack engaging said first geared wheel and said second geared wheel of one of said ~~meshed with the opposite geared wheels of one of the grips~~ gripper elements, said first geared wheel of one gripper element engaging said first gear wheel of another gripper element, said second geared wheel of said one gripper element engaging said second geared wheel of said another gripper element ~~themselves meshed with the geared wheels of the other grip~~.

5. (Currently Amended) ~~Structure of an~~ An angular pneumatic [[chuck]] gripper according to claim 3, further comprising a protective cap located ~~wherein~~ on the side of each geared wheel on the side of the polygonal hub~~, which is coupled to the grip and neck is formed to which a protective cap is associated~~, said cap having flanges located at [[the]] a top center portion thereof and at the bottom ends thereof ~~having some overhangs facing towards the grips~~, said flanges facing opposite said gripper elements, [[the]] said protective

cap engaging ~~at the same time the neck of~~ said first geared wheel of one gripper element and said first geared wheel of another gripper element, said flanges of one protective cap located on one side of said gripper elements engaging said flanges of another protective cap located on another side of said gripper elements ~~the collateral geared wheels of the two grips and the relative overhangs, matching the homologous overhangs of the cap associated with the geared wheels on the opposite part of the grips and acting as scrapers for the external surface of the cylindrical portion of said grips~~.

6. (Currently Amended) ~~Structure of an~~ An angular pneumatic [[chuck]] gripper according to claim 1, wherein each element has a support base and an intermediate section, said support base having two lugs, one lug being located on one side of said support base and another lug being located on another side of said support base, each lug defining a half-hole for receiving ~~in which on the sides of the support base of each shell of the body two lugs with half-holes for~~ anchoring screws, said ~~are formed and on the sides of the~~ intermediate section defining ~~of each shell~~ longitudinal grooves for applying accessories, one longitudinal groove extending along one side of said intermediate section and another longitudinal groove extending along another side of said intermediate section ~~are provided~~.

7 - 8. (Canceled)

9. (Currently Amended) ~~Structure of an~~ An angular pneumatic [[chuck]] gripper

according to claim 3, wherein each element has a support base and an intermediate section, said support base having two lugs, one lug being located on one side of said support base and another lug being located on another side of said support base, each lug defining a half-hole for receiving ~~in which on the sides of the support base of each shell of the body two lugs with half-holes for~~ anchoring screws, said ~~are formed and on the sides of the~~ intermediate section defining ~~of each shell~~ longitudinal grooves for applying accessories, one longitudinal groove extending along one side of said intermediate section and another longitudinal groove extending along another side of said intermediate section ~~are provided~~.

10. (Currently Amended) ~~Structure of an~~ An angular pneumatic [[chuck]] gripper according to claim 4, wherein each element has a support base and an intermediate section, said support base having two lugs, one lug being located on one side of said support base and another lug being located on another side of said support base, each lug defining a half-hole for receiving ~~in which on the sides of the support base of each shell of the body two lugs with half-holes for~~ anchoring screws, said ~~are formed and on the sides of the~~ intermediate section defining ~~of each shell~~ longitudinal grooves for applying accessories, one longitudinal groove extending along one side of said intermediate section and another longitudinal groove extending along another side of said intermediate section ~~are provided~~.

11. (Currently Amended) ~~Structure of an~~ An angular pneumatic [[chuck]] gripper according to claim 5, wherein each element has a support base and an intermediate section,

said support base having two lugs, one lug being located on one side of said support base and another lug being located on another side of said support base, each lug defining a half-hole for receiving ~~in which on the sides of the support base of each shell of the body two lugs with half-holes for~~ anchoring screws, said ~~are formed and on the sides of the~~ intermediate section defining ~~of each shell~~ longitudinal grooves for applying accessories, one longitudinal groove extending along one side of said intermediate section and another longitudinal groove extending along another side of said intermediate section ~~are provided~~.

12. (New) An angular pneumatic gripper, comprising:

a body including a first element and a second element, said first element being symmetrical and identical to said second element, said first element and said second element being positioned such that said first element is disposed opposite said second element, said first element and said second element defining a cavity within said body;

an angular pneumatic piston for reciprocating in said cavity of said body;

a drive element;

two gripper elements for gripping and releasing an item, said gripper elements being supported and guided in said body, said gripper elements being coupled to said piston via said drive, said gripper elements being movable at angles in opposite directions between an open and closed position via said drive element and via reciprocating movements of said piston, said first element and said second element defining a means for receiving and guiding said drive element, said first element and said second element being formed via die-casting,

sintering or forging processes

a first geared wheel;

a second geared wheel;

a support element defining a receiving hole, wherein each gripper element has a lower cylindrical section, said lower cylindrical section defining a polygonal hole, said lower cylindrical section being coupled to said first geared wheel and said second geared wheel, said first geared wheel being located on one side of said lower cylindrical section and said second geared wheel being located on another side of said lower cylindrical section, each geared wheel having a polygonal hub on one side, said polygonal hole receiving said polygonal hub, each geared wheel having a cylindrical hub on another side, said receiving hole of said support hole receiving said cylindrical hub, said first geared wheel and said second geared wheel being attached to one of said gripper elements via a bolt extending through the hubs of the geared wheels, said bolt forming an axis of rotation of the gripper element, said support element supporting collateral geared wheels of the two gripper elements.

13. (New) An angular pneumatic gripper, comprising:

a body including a first element and a second element, said first element being symmetrical and identical to said second element, said first element and said second element being positioned such that said first element is disposed opposite said second element, said first element and said second element defining a cavity within said body;

an angular pneumatic piston for reciprocating in said cavity of said body;

a drive element;

two gripper elements for gripping and releasing an item, said gripper elements being supported and guided in said body, said gripper elements being coupled to said piston via said drive, said gripper elements being movable at angles in opposite directions between an open and closed position via said drive element and via movement of said piston, said first element and said second element defining a means for receiving and guiding said drive element, said first element and said second element being formed via die-casting, sintering or forging processes

a first geared wheel;

a second geared wheel;

a support element defining a receiving hole, wherein each gripper element has a lower cylindrical section, said lower cylindrical section defining a polygonal hole, said lower cylindrical section being coupled to said first geared wheel and said second geared wheel, said first geared wheel being located on one side of said lower cylindrical section and said second geared wheel being located on another side of said lower cylindrical section, each geared wheel having a polygonal hub on one side, said polygonal hole receiving said polygonal hub, each geared wheel having a cylindrical hub on another side, said receiving hole of said support hole receiving said cylindrical hub, said first geared wheel and said second geared wheel being attached to one of said gripper elements via a bolt extending through the hubs of the geared wheels, said bolt forming an axis of rotation of the gripper

element, said support element supporting collateral geared wheels of the two gripper elements, said drive element having a pair of indexing racks, each indexing rack engaging said first geared wheel and said second geared wheel of one of said gripper elements, said first geared wheel of one gripper element engaging said first gear wheel of another gripper element, said second geared wheel of said one gripper element engaging said second geared wheel of said another gripper element.

14. (New) An angular pneumatic gripper, comprising:

a body including a first element and a second element, said first element being symmetrical and identical to said second element, said first element and said second element being positioned such that said first element is disposed opposite said second element, said first element and said second element defining a cavity within said body;

an angular pneumatic piston for reciprocating in said cavity of said body;

a drive element;

two gripper elements for gripping and releasing an item, said gripper elements being supported and guided in said body, said gripper elements being coupled to said piston via said drive, said gripper elements being movable at angles in opposite directions between an open and closed position via said drive element and via movement of said piston, said first element and said second element defining a means for receiving and guiding said drive element, said first element and said second element being formed via die-casting, sintering or forging processes

a first geared wheel;

a second geared wheel;

a support element defining a receiving hole, wherein each gripper element has a lower cylindrical section, said lower cylindrical section defining a polygonal hole, said lower cylindrical section being coupled to said first geared wheel and said second geared wheel, said first geared wheel being located on one side of said lower cylindrical section and said second geared wheel being located on another side of said lower cylindrical section, each geared wheel having a polygonal hub on one side, said polygonal hole receiving said polygonal hub, each geared wheel having a cylindrical hub on another side, said receiving hole of said support hole receiving said cylindrical hub, said first geared wheel and said second geared wheel being attached to one of said gripper elements via a bolt extending through the hubs of the geared wheels, said bolt forming an axis of rotation of the gripper element, said support element supporting collateral geared wheels of the two gripper elements;

a protective cap located on the side of each geared wheel on the side of the polygonal hub, said cap having flanges located at a top center portion thereof and at the bottom ends thereof, said flanges facing opposite said gripper elements, said protective cap engaging said first geared wheel of one gripper element and said first geared wheel of another gripper element, said flanges of one protective cap located on one side of said gripper elements engaging said flanges of another protective cap located on another side of said gripper elements.

15. (New) An angular pneumatic gripper, comprising:

a body including a first element and a second element, said first element being symmetrical and identical to said second element, said first element and said second element being positioned such that said first element is disposed opposite said second element, said first element and said second element defining a cylindrical cavity within said body;

an angular pneumatic piston reciprocating in said cylindrical cavity of said body;

a drive element;

two gripper elements for gripping and releasing an item, said gripper elements being supported and guided in said body, said gripper elements being coupled to said piston via said drive, said gripper elements being movable at angles in opposite directions between an open and closed position via said drive element and via movement of said piston, said first element and said second element defining a means for receiving and guiding said drive element, said first element and said second element being formed via die-casting, sintering or forging processes, each element of said body having a support base, an intermediate section element, two shoulder elements and a top crosspiece, each shoulder element being connected to said top crosspiece and said intermediate section element, said intermediate section of each element centrally forming said cylindrical cavity, said cylindrical cavity having an open end and a closed end, said open end of said cylindrical cavity of said first element being opposite said open end of said cylindrical cavity of said second element, said first element and said second element having a top wall, two housing elements and a sliding

surface, said top wall, said two housing elements and said sliding surface defining a chamber having a first opening on one side and a second opening on another side, one housing element being opposite another housing element, said first opening of said first element being opposite said first opening of said second element, said sliding surface being positioned parallel above said cylindrical cavity and having a half-slot located at a side of said first opening, said intermediate section defining holes for receiving fasteners, said holes being adjacent said cylindrical cavity and extending parallel to said cylindrical cavity, said first element being fixed to said second element such that said chamber of said first element and said chamber of said second element form a drive receiving chamber and said cylindrical cavity of said first element and said cylindrical cavity of said second element form a piston receiving chamber and said half-slot of first element and said half-slot of said second element form a full slot, said drive element engaging said sliding surface of said first element and said second element, said drive element being connected to said piston via a through pin, said through pin extending through said full slot, one gripper element extending through said second opening of said first element, another gripper element extending through said second opening of said second element, whereby a portion of each gripper element is located within said drive receiving chamber;

a first geared wheel;

a second geared wheel;

a support element defining a receiving hole, wherein each gripper element has a lower cylindrical section, said lower cylindrical section defining a polygonal hole, said lower

cylindrical section being coupled to said first geared wheel and said second geared wheel, said first geared wheel being located on one side of said lower cylindrical section and said second geared wheel being located on another side of said lower cylindrical section, each geared wheel having a polygonal hub on one side, said polygonal hole receiving said polygonal hub, each geared wheel having a cylindrical hub on another side, said receiving hole of said support hole receiving said cylindrical hub, said first geared wheel and said second geared wheel being attached to one of said gripper elements via a bolt extending through the hubs of the geared wheels, said bolt forming an axis of rotation of the gripper element, said support element supporting collateral geared wheels of the two gripper elements.

16. (New) An angular pneumatic gripper, comprising:

a body including a first element and a second element, said first element being symmetrical and identical to said second element, said first element and said second element being positioned such that said first element is disposed opposite said second element, said first element and said second element defining a cylindrical cavity within said body, each element having a support base and an intermediate section, said support base having two lugs, one lug being located on one side of said support base and another lug being located on another side of said support base, each lug defining a half-hole for receiving anchoring fasteners, said intermediate section defining longitudinal grooves for applying accessories, one longitudinal groove extending along one side of said intermediate section and another

longitudinal groove extending along another side of said intermediate section;

an angular pneumatic piston for reciprocating in said cylindrical cavity of said body;

a drive element;

two gripper elements for gripping and releasing an item, said gripper elements being supported and guided in said body, said gripper elements being coupled to said piston via said drive, said gripper elements being movable at angles in opposite directions between an open and closed position via said drive element and via movement of said piston, said first element and said second element defining a means for receiving and guiding said drive element, said first element and said second element being formed via die-casting, sintering or forging processes, each element of said body having a support base, an intermediate section element, two shoulder elements and a top crosspiece, each shoulder element being connected to said top crosspiece and said intermediate section element, said intermediate section of each element centrally forming said cylindrical cavity, said cylindrical cavity having an open end and a closed end, said open end of said cylindrical cavity of said first element being opposite said open end of said cylindrical cavity of said second element, said first element and said second element having a top wall, two housing elements and a sliding surface, said top wall, said two housing elements and said sliding surface defining a chamber having a first opening on one side and a second opening on another side, one housing element being opposite another housing element, said first opening of said first element being opposite said first opening of said second element, said sliding surface being positioned parallel above said cylindrical cavity and having a half-slot located at a side of

said first opening, said intermediate section defining holes for receiving fasteners, said holes being adjacent said cylindrical cavity and extending parallel to said cylindrical cavity, said first element being fixed to said second element such that said chamber of said first element and said chamber of said second element form a drive receiving chamber and said cylindrical cavity of said first element and said cylindrical cavity of said second element form a piston receiving chamber and said half-slot of first element and said half-slot of said second element form a full slot, said drive element engaging said sliding surface of said first element and said second element, said drive element being connected to said piston via a through pin, said through pin extending through said full slot, one gripper element extending through said second opening of said first element, another gripper element extending through said second opening of said second element, whereby a portion of each gripper element is located within said drive receiving chamber.

17. (New) An angular pneumatic gripper, comprising:

a body including a first element and a second element, said first element being symmetrical and identical to said second element, said first element and said second element being positioned such that said first element is disposed opposite said second element, said first element and said second element defining a cavity within said body, each element having a support base and an intermediate section, said support base having two lugs, one lug being located on one side of said support base and another lug being located on another side of said support base, each lug defining a half-hole for receiving anchoring fasteners, said

intermediate section defining longitudinal grooves for applying accessories, one longitudinal groove extending along one side of said intermediate section and another longitudinal groove extending along another side of said intermediate section;

an angular pneumatic piston for reciprocating in said cavity of said body;

a drive element;

two gripper elements for gripping and releasing an item, said gripper elements being supported and guided in said body, said gripper elements being coupled to said piston via said drive, said gripper elements being movable at angles in opposite directions between an open and closed position via said drive element and via movement of said piston, said first element and said second element defining a means for receiving and guiding said drive element, said first element and said second element being formed via die-casting, sintering or forging processes

a first geared wheel;

a second geared wheel;

a support element defining a receiving hole, wherein each gripper element has a lower cylindrical section, said lower cylindrical section defining a polygonal hole, said lower cylindrical section being coupled to said first geared wheel and said second geared wheel, said first geared wheel being located on one side of said lower cylindrical section and said second geared wheel being located on another side of said lower cylindrical section, each geared wheel having a polygonal hub on one side, said polygonal hole receiving said polygonal hub, each geared wheel having a cylindrical hub on another side, said receiving

hole of said support hole receiving said cylindrical hub, said first geared wheel and said second geared wheel being attached to one of said gripper elements via a bolt extending through the hubs of the geared wheels, said bolt forming an axis of rotation of the gripper element, said support element supporting collateral geared wheels of the two gripper elements.

18. (New) An angular pneumatic gripper, comprising:

a body including a first element and a second element, said first element being symmetrical and identical to said second element, said first element and said second element being positioned such that said first element is disposed opposite said second element, said first element and said second element defining a cavity within said body, each element having a support base and an intermediate section, said support base having two lugs, one lug being located on one side of said support base and another lug being located on another side of said support base, each lug defining a half-hole for receiving anchoring fasteners, said intermediate section defining longitudinal grooves for applying accessories, one longitudinal groove extending along one side of said intermediate section and another longitudinal groove extending along another side of said intermediate section;

an angular pneumatic piston for reciprocating in said cavity of said body;

a drive element;

two gripper elements for gripping and releasing an item, said gripper elements being supported and guided in said body, said gripper elements being coupled to said piston via

said drive, said gripper elements being movable at angles in opposite directions between an open and closed position via said drive element and via movement of said piston, said first element and said second element defining a means for receiving and guiding said drive element, said first element and said second element being formed via die-casting, sintering or forging processes

a first geared wheel;

a second geared wheel;

a support element defining a receiving hole, wherein each gripper element has a lower cylindrical section, said lower cylindrical section defining a polygonal hole, said lower cylindrical section being coupled to said first geared wheel and said second geared wheel, said first geared wheel being located on one side of said lower cylindrical section and said second geared wheel being located on another side of said lower cylindrical section, each geared wheel having a polygonal hub on one side, said polygonal hole receiving said polygonal hub, each geared wheel having a cylindrical hub on another side, said receiving hole of said support hole receiving said cylindrical hub, said first geared wheel and said second geared wheel being attached to one of said gripper elements via a bolt extending through the hubs of the geared wheels, said bolt forming an axis of rotation of the gripper element, said support element supporting collateral geared wheels of the two gripper elements, said drive element having a pair of indexing racks, each indexing rack engaging said first geared wheel and said second geared wheel of one of said gripper elements, said first geared wheel of one gripper element engaging said first gear wheel of another gripper

element, said second geared wheel of said one gripper element engaging said second geared wheel of said another gripper element.

19. (New) An angular pneumatic gripper, comprising:

a body including a first element and a second element, said first element being symmetrical and identical to said second element, said first element and said second element being positioned such that said first element is disposed opposite said second element, said first element and said second element defining a cavity within said body, each element having a support base and an intermediate section, said support base having two lugs, one lug being located on one side of said support base and another lug being located on another side of said support base, each lug defining a half-hole for receiving anchoring fasteners, said intermediate section defining longitudinal grooves for applying accessories, one longitudinal groove extending along one side of said intermediate section and another longitudinal groove extending along another side of said intermediate section;

an angular pneumatic piston for reciprocating in said cavity of said body;

a drive element;

two gripper elements for gripping and releasing an item, said gripper elements being supported and guided in said body, said gripper elements being coupled to said piston via said drive, said gripper elements being movable at angles in opposite directions between an open and closed position via said drive element and via movement of said piston, said first element and said second element defining a means for receiving and guiding said drive

element, said first element and said second element being formed via die-casting, sintering or forging processes

a first geared wheel;

a second geared wheel;

a support element defining a receiving hole, wherein each gripper element has a lower cylindrical section, said lower cylindrical section defining a polygonal hole, said lower cylindrical section being coupled to said first geared wheel and said second geared wheel, said first geared wheel being located on one side of said lower cylindrical section and said second geared wheel being located on another side of said lower cylindrical section, each geared wheel having a polygonal hub on one side, said polygonal hole receiving said polygonal hub, each geared wheel having a cylindrical hub on another side, said receiving hole of said support hole receiving said cylindrical hub, said first geared wheel and said second geared wheel being attached to one of said gripper elements via a bolt extending through the hubs of the geared wheels, said bolt forming an axis of rotation of the gripper element, said support element supporting collateral geared wheels of the two gripper elements;

a protective cap located on the side of each geared wheel on the side of the polygonal hub, said cap having flanges located at a top center portion thereof and at the bottom ends thereof, said flanges facing opposite said gripper elements, said protective cap engaging said first geared wheel of one gripper element and said first geared wheel of another gripper element, said flanges of one protective cap located on one side of said

gripper elements engaging said flanges of another protective cap located on another side of said gripper elements.